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- "Stress And Internal Migration In Sarawak, East Malaysia: The Case Of The Iban," East Lakes Region, Association of American Geographers Annual Conference, Ann Arbor, MI, 1976.

Project Experience

[Listed in alphabetical order by client company]

CLIENT: Alltel Carolina/Alltel Southern Region (telephone operating company and service

corporation)

Project Title: CAD/E

Project Focus: outside plant

Project Manager. Bobby Woodard, Alltel Carolina, PO Box 428, Matthews, NC 28106

USA

Hardware/Software: Intergraph workstations, Intergraph FRAMME

Services Provided: training Dates of Service: 1991

CLIENT: Ameritech Services, Inc. (telephone service corporation)

Project Title: AIRS

Project Focus: outside plant

Project Manager: Timothy Andres, Ameritech Services, 1900 E Golf Rd, Schaumburg, IL

60173 USA

Hardware/Software: Intergraph workstations, Intergraph FRAMME

Services Provided: technology assessment, training

Dates Of Service: 1990

CLIENT: Andrew Corporation (telephone competitive access provider and long distance

company)

Project Title: Russian JV Info Systems

Project Focus: OSP for SDH

Project Manager: Ed Beavers, Andrew Corporation, 32A Leninski Prospekt, Moscow,

RUSSIA

Hardware/Software: various microcomputers, Cadtel, AutoCad, ArcCad Services Provided: technology assessment, system design, training

Dates of Service: 1993-1994

CLIENT: Antigua Public Utilities Authority Company (public utilities and telephone com-

pany)

Project Title: N/A

Project Focus: outside plant

Project Manager: Brian G. Larkin, Antiqua Telephones PO Box 416, Saint John's, ANTI-

GUA

Hardware/Software: microcomputers Services Provided: consulting, training

Dates of Service: 1995

CLIENT: AT&T - EDDS (telephone service corporation)

Project Title: (prototype system)
Project Focus: outside plant

Project Manager: Erv Thompson, AT&T-EDDS, 4 Wood Hollow Rd, Parsippany, NJ

07054 USA

Hardware/Software: various processors, including VAX and Cray, Syscan (data capture and vectorization), proprietary data base manager, customized AM/FM/GIS software

Services Provided: definition of data base structures and code lists, definition of feature rules, definition of graphics specifications, prototype system design, technology assessment, training

Dates of Service: 1988-1989

CLIENT: Barbados Telephone Company (telephone operating company)

Project Title: N/A

Project Focus: outside plant

Project Manager. Edwin Layne, Barbados Telephone Company, PO Box 272, St. Michael,

BARBADOS

Hardware/Software: microcomputers, DEC workstations, GeoVision software Services Provided: consulting, system design, technology assessment, training

Dates of Service: 1991-1993

CLIENT: C3 (computer hardware manufacturer)

Project Title: Market Analysis Study - Portable Graphics Workstations

Project Focus: equipment design and marketing

Project Manager. David Shepherd, C3, Inc., 460 Herndon Parkway, Herndon, VA 22070

USA

Hardware/Software: Intel and SPARC processors ruggedized for field use

Services Provided: feasibility study, market analysis, product development, product mar-

keting, technology assessment, training

Dates of Service: 1991-1992

<u>CLIENT</u>: CDI Telecommunications (telecommunications engineering services company)

Project Title: N/A

Project Focus: outside plant

Project Manager. Bradley Cranston, CDI Telecom, 311 Park Place Blvd., Clearwater, FL

34619 USA

Hardware/Software: various microcomputers, MicroStation, GTEDS IDDS

Services Provided: market analysis, technology assessment, training

Dates of Service: 1991-1992

CLIENT: CFW Telephone Company (telephone operating company)

Project Title: N/A

Project Focus: outside plant

Project Manager. Mr. Peter H. Coffey, CFW Telephone, PO Box 1527, Waynesboro, VA

22980 USA

Hardware/Software: IBM A/S 400, microcomputers Services Provided: technology assessment, training

Dates of Service: 1990

CLIENT: Coastal Utilities, Inc. (telephone operating company)

Project Title: AM/FM system Project Focus: outside plant

Project Manager: Michael Valentine, Coastal Utilities, PO Box 585, Hinesville, GA 31313

USA

Hardware/Software: Intergraph VAX system, Intergraph FRAMME, IBM A/S 400

Services Provided: consulting during preparation of rules base, definition of data definition language, definition of external code lists, definition of graphics specifications, preparation of conversion specifications, preparation of land base specifications, training

Dates of Service: 1989-1991

CLIENT: CSC Intelicom (computer software vendor)

Project Title: Market Opportunities

Project Focus: work force management software and outside plant data field access software

Project Manager. Peter Winder, CSC Intelicom, 6707 Democracy Blvd., Bethesda, MD 20817 USA

Hardware/Software: various workstations and microcomputers, UNIX, C, 4-GLs

Services Provided: acquisition evaluations, joint venture evaluations, marketing, consult-

ing, technology assessment, training

Dates of Service: 1992

<u>CLIENT</u>: Edmonton Telephones (telephone operating company)

Project Title: several

Project Focus: outside plant

Project Manager: Claude Mollot, EdTel, 10044 108th Street, Edmonton, Alberta, T5J 3S7

CANADA

Hardware/Software: Various processors, Enghouse CableCad (T)

Services Provided: consulting, preparation of RFP, training, validation of data base

structure, validation of code lists, validation of graphics specifications

Dates of Service: 1991-1992

<u>CLIENT</u>: Fail Engineering Company (telecommunications engineering services company, telephone operating company consortium, holding company)

Project Title: N/A

Project Focus: outside plant

Project Manager. Bobby Hinton, Fail Engineering, PO Box 925, Bay Springs, MS 39422

USA

Hardware/Software: microcomputers

Services Provided: technology assessment, training

Dates of Service: 1990

CLIENT: Generation 5 Technology (computer software vendor)

Project Title: N/A

Project Focus: outside plant

Project Manager. Mark Wilding, G5 Technology, 8670 Wolff Court, Westminster, CO

80030 USA

Hardware/Software: GeoSQL, Oracle, AutoCad

Services Provided: definition of data base structure, definition of external code lists, definition of feature rules, definition of graphics specifications, marketing, design telephone

applications

Dates of Service: 1991-1992

CLIENT: GeoTechnology International (cartographic data conversion service bureau)

Project Title: several

Project Focus: outside plant

Project Manager. Charles Rolling, GeoTechnology Intl., 3637 Medina Road, Medina, OH

44256 USA

Hardware/Software: Intergraph VAX systems, Intergraph FRAMME, IBM systems and Enghouse software, Data General hardware and proprietary software

Services Provided: as-built production, edit verification, outside plant engineering, record

posting and record scrub, technology assessment, work order posting

Dates of Service: 1989-1991

CLIENT: GeoVision Systems (computer software vendor)

Project Title: DEWS, VISION* Project Focus: outside plant

Project Manager: Perry Evans, GeoVision Systems, 5251 DTC Parkway, Englewood, CO

80111 USA

Hardware/Software: various processors, DEWS, AMS/ GIS, VISION* Services Provided: market analysis, technology assessment, training

Dates of Service: 1991-1992

CLIENT: GTE Data Services (telephone service corporation)

Project Title: IDDS

Project Focus: AM/FM system software

Project Manager. Gerald Schick, GTEDS, 12470 E Telcom Pkwy, Temple Terrace, FL

33687 USA

Hardware/Software: Intergraph VAX systems, Intergraph T-FIDS, MicroStation PC, Mi-

croStation 32, MicroIDDS (MicroCapture, MicroCert, MicroWPG)

Services Provided: market analysis, marketing services, product evaluation, software beta

testing, technology assessment Dates of Service: 1989-1991

CLIENT: GTE-Florida (GTE South Area) (telephone operating company)

Project Title: ICGS

Project Focus: outside plant

Project Manager: David Lane, GTE South Area, PO Box 110, Tampa, FL 33601 USA Hardware/Software: Intergraph VAX systems, Intergraph T-FIDS (009 GTE specifica-

Services Provided: on-premise digitizing, preparation of land base specifications, record

posting, work order posting Dates of Service: 1987-1991

CLIENT: GTE-Florida (GTE South Area) (telephone operating company)

Project Title: Planning-ICGS Interface

Project Focus: network planning

Project Manager: James Englert, GTE South Area, PO Box 110, Tampa, FL 33601 USA Hardware/Software: Intergraph VAX, Intergraph T-FIDS (009 GTE specs), MicroStation Services Provided: definition of data definition language and code lists, definition of

graphics specifications, preparation of conversion specifications, training

Dates of Service: 1989-1990

CLIENT: Lambda Tech International (technology development company)

Project Title: GPSVision

Project Focus: mobile GPS data collection

Project Manager: David Baraniak, President, W239 N1812 Rockwood, Waukesha, WI

53188 USA

Hardware/Software: N/A

Services Provided: marketing, product development

Dates of Service: 1994-1995

CLIENT: LCTX (formerly, Lufkin-Conroe Telephone Exchange) (telephone operating

company)

Project Title: GEMS

Project Focus: outside plant

Project Manager. Pat Singletary, LCTX, PO Box 1568, Conroe, TX 77305 USA

Hardware/Software: IBM RT/IBM RS 6000, GeoVision DEWS (GIS and AMS), IBM A/S

400

Services Provided: definition of data base schema, code lists, graphics specifications, preparation of land base and conversion specifications, vendor and technology assess-

ment, training

Dates of Service: 1989-1991

CLIENT: MCI Telecommunications (long distance carrier)

Project Title: MIRACLES

Project Focus: outside plant, right-of-way

Project Manager. Jim Tatum, MCI, 400 International Parkway, Richardson, Texas 75081

USA

Hardware/Software: Intergraph VAX systems, Intergraph FRAMME, various microcom-

puters

Services Provided: as-built production, consulting on rules base, definition of data definition language, code lists, and graphics specifications, edit verification and acceptance testing, on-premise digitizing, preparation of land base and conversion specifications, record posting and record scrub, vendor evaluations, technology assessment, training

Dates of Service: 1985-1991

CLIENT: MSE Corporation (cartographic data conversion service bureau)

Project Title: NA

Project Focus: outside plant

Project Manager: Robert Meister, MSE Corporation, 941 N Meridian St., Indianapolis, IN

46204 USA

Hardware/Software: Intergraph VAX systems, Intergraph FRAMME

Services Provided: record posting and record scrub

Dates of Service: 1989

CLIENT: New England Telephone (telephone operating company)

Project Title: Central Artery Division Project

Project Focus: outside plant

Project Manager. Robert Bentley, New England Telephone, 425 Summer St., Boston, MA

02210 USA

Hardware/Software: evaluation study

Services Provided: technology assessment, training

Dates of Service: 1990

<u>CLIENT</u>: Pacific Bell Telephone Company - North Coast (telephone operating company)

Project Title: MRD

Project Focus: outside plant

Project Manager: Wendy Cline, Pacific Bell, 2125 Occidental Road, Santa Rosa, CA

95401 USA

Hardware/Software: various microcomputers, Enghouse CableCad(T) software

Services Provided: consulting, preparation of land base specifications, preparation of

request for quotations, training, vendor evaluations

Dates of Service: 1991-1992

<u>CLIENT</u>: Pacific Bell Telephone Company - Valley Central Coast (telephone operating company)

Project Title: CAFM

Project Focus: outside plant

Project Manager. Chris Downs, Pacific Bell, 217 W Acequia, FL 1, Visalia, CA 93291

USA

Hardware/Software: various microcomputers, Enghouse CableCad(T) software

Services Provided: consulting, preparation of land base specifications, preparation of

request for quotations, training, vendor evaluations

Dates of Service: 1991-1992

<u>CLIENT</u>: Pacific Bell Telephone Company - Orange-Riverside (telephone operating company)

Project Title: NA

Project Focus: outside plant

Project Manager. Bob Barnett, Pacific Bell, 3939 E Coronado, Anaheim, CA 92807 USA

Hardware/Software: under development

Services Provided: consulting, preparation of hardware/software specifications, training,

vendor evaluations

Dates of Service: 1992-1993

<u>CLIENT</u>: SaskTel (telephone operating company)

Project Title: STAGES

Project Focus: outside plant

Project Manager: Glen Squires, SaskTel, 2121 Saskatchewan Dr., Regina, SK, S4P 3Y2

CANADA

Hardware/Software: various processors, software selection progress

Services Provided: consulting, feasibility analysis, software evaluation, technical assess-

ment, training

Dates of Service: 1992-1993

<u>CLIENT</u>: Southern Bell Telephone (telephone operating company)

Project Title: PLRMS

Project Focus: outside plant

Project Manager. Joyce Rector, Southern Bell Telephone, 675 W Peachtree St., Atlanta,

GA 30375 USA

Hardware/Software: Intergraph VAX systems, Intergraph T-FIDS

Services Provided: data conversion, record posting and record scrub, technical as-

sessment, work order posting

Dates of Service: 1984-1985

<u>CLIENT</u>: Southwestern Bell Telephone (telephone operating company)

Project Title: 911-EMS
Project Focus: 911-EMS

Project Manager. Bill Horne, Southwestern Bell Telephone, 2401 E Randol Mill, Arlington,

TX 76011 USA

Hardware/Software: N/A

Services Provided: technology assessment, training

Dates of Service: 1988-1989

CLIENT: Southwestern Bell Telephone (telephone operating company)

Project Title: DEWS/MPLR Project Focus: outside plant

Project Manager, Antonio Gaber, Southwestern Bell Telephone, 308 S Akard, Dallas, TX

75202 USA

Hardware/Software: MPLR (Data General and proprietary), GeoVision DEWS (GIS and

AMS)

Services Provided: work order posting (sub-contract)

Dates of Service: 1990

CLIENT: TELEBRAS CPqD (Brazilian national telephone company holding corporation)

Project Title: SAGRE

Project Focus: outside plant

Project Manager. Dr. Geovane Magalhaes, TELEBRAS CPqD, Caixa Postal 1579,

Campinas 13085 SP, BRAZIL

Hardware/Software: various processors, GeoVision DEWS and VISION*, custom OSP

software

Services Provided: consulting, technology assessment, training

Dates of Service: 1991-1992

<u>CLIENT</u>: TIME Quantum Technology/TIME Telekom (information systems division of telecommunications services company)

Project Title: Network Inventory System (NIS)

Project Focus: GIS for SDH

Project Manager. Chin Choon Moy, TQT, Floor 6, Menara Maxisegar, Jalan Pandan In-

dah 4/2, 55100 Pandan Indah, Kuala Lumpur, MALAYSIA

Hardware/Software: SUN workstations, Enghouse Geonet software, Oracle DBMS

Services Provided: consulting, system design, technology assessment, training

Dates of Service: 1995-1996